AMENDMENTS

IN THE CLAIMS:

Please amend claims 1 and 13, as follows:

1.   (Currently amended) Method for selecting frequency channels in a data transmission method that uses a frequency hopping method, comprising:

determining an existence of interference on a frequency channel, comprising: detecting multiple erroneous transmissions in the frequency channel at a time that is independent of the other channels;

incrementing a counter each time an erroneous transmission on the frequency channel is identified;

decrementing the counter each time an error-free transmission on the frequency channel is identified;

repeating the acts of incrementing and decrementing the counter until the count exceeds a prescribed value; and

determining that interference exists on the channel when the count exceeds the prescribed threshold value;

eliminating the frequency channel from a frequency hopping sequence when a determination is made that interference exists thereon the frequency channel;

measuring a strength of external signals within a frequency range of an eliminated frequency channel; and

reinserting the frequency channel into the frequency hopping sequence if when the measured strength is below a prescribed threshold value[,]

wherein determining whether interference exists further comprises:

identifying a number of error free transmissions on the channel within the predetermined period of time; and

~~using both the number of erroneous transmissions and the number of~~
~~error free transmissions to determination whether interference exists on the~~
~~channel, and wherein using both the erroneous and error free transmissions~~
~~comprises:~~

> ~~incrementing a first counter each time an erroneous transmission is~~
> ~~identified within the predetermined time period;~~
> ~~incrementing a second counter each time an error free~~
> ~~transmission is identified within the predetermined time period;~~
> ~~generating a ratio based the counts of the first and second~~
> ~~counters after the predetermined time period has elapsed; and~~
> ~~determining that interference exists on the channel when the ratio~~
> ~~exceeds a predetermined threshold.~~

2. (Cancelled).

3. (Cancelled).

4. (Previously presented) The method of Claim 1, wherein detecting an erroneous transmission further comprises using checksums that are added to block-transmitted data at an end thereof.

5. (Original) The method of Claim 4, wherein using checksums comprises adding a CRC (Cyclic Redundancy Check) code to each data block at the end thereof.

6. (Original) The method of Claim 1, wherein the data transmission method comprises a timeslot method, and measuring the external signal strength comprises measuring during unused timeslots.

7. (Original) The method of Claim 1, wherein measuring the external signal strength comprises performing a field strength measurement based on the RSSI (Radio Signal Strength Indication) method.

8. (Cancelled).

9. (Cancelled).

10.(Cancelled).

11. (Original) A method for data transmission between at least two stations via radio links using the frequency hopping method and the frequency channel selection method of Claim 1.

12. (Original) The method of Claim 11 wherein the method is based on one of the transmission standards Bluetooth, WDCT, DECT or HomeRF.

13. (Currently amended) A method for selecting frequency channels in an adaptive frequency hopping methodology, comprising:

evaluating a channel for interference associated therewith, comprising: at a time that is independent of at least some of the other channels;

incrementing a counter each time an erroneous transmission on the channel is identified;

decrementing the counter each time an error-free transmission on the channel is identified;

repeating the acts of incrementing and decrementing the counter until the count exceeds a prescribed value; and

determining that interference exists on the channel when the count exceeds the prescribed threshold value;

eliminating the channel from a channel hopping sequence when the channel has interference;

re-evaluating eliminated channels; and

reinserting eliminated channels back into the channel hopping sequence when interference is no longer associated therewith, ~~wherein evaluating the channel for interference further comprises:~~

~~identifying a number of error free transmissions on the channel within the predetermined period of time; and~~

~~using both the number of erroneous transmissions and the number of error free transmissions to determination whether interference exists on the channel, and wherein using both the erroneous and error free transmissions comprises:~~

~~incrementing a first counter each time an erroneous transmission is identified within the predetermined time period;~~

~~incrementing a second counter each time an error free transmission is identified within the predetermined time period;~~

~~generating a ratio based the counts of the first and second counters after the predetermined time period has elapsed; and~~

~~determining that interference exists on the channel when the ratio exceeds a predetermined threshold.~~

14. (Cancelled).

15. (Cancelled).

16. (Cancelled).

17. (Cancelled).

18. (Previously presented) The method of claim 13, wherein re-evaluating an eliminated channel from the channel hopping sequence comprises:

measuring an interference signal strength associated with the channel; and

determining that interference no longer exists on the channel when the measured interference signal strength is less than a predetermined amount.

19. (Previously presented) The method of claim 18, wherein determining that interference no longer exists further comprises:

decrementing a counter when the measured signal strength is less than a predetermined threshold;

comparing a count of the counter to a predetermined value; and

determining that interference no longer exists when the count is less than or equal to the predetermined value.